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EXAMINER

LAY, MICHELLE K

ART UNIT PAPER NUMBER

2672

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,992	<b>Applicant(s)</b> SIKORSKI, STEVEN MAURICE	
	<b>Examiner</b> Michelle K. Lay	<b>Art Unit</b> 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*ay*

## **DETAILED ACTION**

### ***Drawings***

The drawings were received on 02 August 2005. These drawings are acceptable.

### ***Response to Amendment***

The amendment filed on 02 August 2005, has been entered and made of record. Claims 1-17 are pending.

### ***Response to Arguments***

Applicant's arguments filed 02 August 2005 have been fully considered but they are not persuasive.

1. In regards to Applicant's arguments of the rejection of claims **1, 2, 5, 6, 7, 16** under 35 U.S.C. 102(e) as being anticipated by Manchester (US 2004/0201595), Applicant argues Manchester does not teach orienting the display based upon a user perspective. However, Manchester teaches a self-orienting display that senses the orientation of an object and automatically orients a display image in accordance with the orientation of that object [Manchester [0019]]. Since the object of Manchester is the display device, such as a hand held device [*abstract*], the user would need to hold the display device in a manner so that the user can view the image on the display, e.g. in

front of the user's eyes. Thus, the sensors of the self-orienting display would orient the image based on how the user is holding the display device, thus taking into account the user's perspective.

2. In regards to Applicant's argument of the rejection of claims **3, 4, 8 – 12, 15**, under 35 U.S.C. 103(a) as being unpatentable over Manchester (US Publication No. US 2004/0201595 A1) in view of Browning (US Patent No. US 6,707,581 B1), Applicant argues Manchester in view of Browning does not teach orienting the display based upon a user perspective. However, as stated above, Manchester teaches a self-orienting display that senses the orientation of an object and automatically orients a display image in accordance with the orientation of that object [Manchester [0019]]. Since the object of Manchester is the display device, such as a hand held device [*abstract*], the user would need to hold the display device in a manner so that the user can view the image on the display, e.g. in front of the user's eyes. Thus, the sensors of the self-orienting display would orient the image based on how the user is holding the display device, thus taking into account the user's perspective. Furthermore, Browning teaches also a hand held device, such as a PDA, with a scanner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a barcode scanner as the camera within the authentication component of Manchester because the barcode scanner would provide a means to sense an object (such as a barcode) in order to display the object associated with the barcode within display portion (14a) of

Fig. 1 of Manchester and provide information associated with the barcode of that obtained image within the display portion (14b) of Fig. 1 of Manchester.

3. In regards to Applicant's arguments of the rejection of claims **13** and **14** under 35 U.S.C. 103(a) as being unpatentable over Browning (US Patent No. US 6,707,581 B1) in view of Manchester (US Publication No. US 2004/0201595 A1). Applicant argues Browning in view of Manchester does not teach orienting the display based upon a user perspective. However, Manchester teaches a self-orienting display that senses the orientation of an object and automatically orients a display image in accordance with the orientation of that object [Manchester [0019]]. Since the object of Manchester is the display device, such as a hand held device [*abstract*], the user would need to hold the display device in a manner so that the user can view the image on the display, e.g. in front of the user's eyes. Thus, the sensors of the self-orienting display would orient the image based on how the user is holding the display device, thus taking into account the user's perspective. Furthermore, as stated prior, the display device of Manchester is a hand held device, thus the user would be holding the display device. Therefore, the self-orienting display of Manchester senses the orientation of the object, which is held in the user's hand, and the sensors of the self-orienting display of Manchester takes into account the physical orientation of the user when automatically rendering an image on the self-orienting display. Additionally, by self-orienting the display depending on the orientation of the display device which is held by the user, provides an optimized viewing position.

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4. Applicant's arguments with respect to claim **17** have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims **1, 2, 5, 6, 7, 16** are rejected under 35 U.S.C. 102(e) as being anticipated by Manchester (US Publication No. US 2004/0201595 A1).

In regards to claim **1, 5, 6, 7, 16** –

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12) (claims **1, 16: *display component***), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **1: *a mobile device comprising a display component***) and wireless devices (e.g., cellular devices including telephones,

PDA's, portable computers) (claim 7) [0020]. A gyroscopic sensor is an example of an appropriate sensor for sensor (16) (claim 6). The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 (claim 5) and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim 16: ***means for determining user desire orientation for rendering objects***) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 1: ***automatically orients display based on user perspective***) [0025].

In regards to claim 2 –

The device of Manchester further allows the relative orientation between the display image (14) of Fig. 3 and viewer (36) of Fig. 8 to be approximately constant. Thus, if a viewer tilts her head, the display image (14) is tilted in the same direction (claim 2: ***desired orientation***), such that the orientation between the viewer and the displayed image (14) is approximately constant (fixed) (claim 2: ***based on user context or state***) [0026].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **3, 4, 8 – 12, 15**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Manchester (US Publication No. US 2004/0201595 A1) in view of Browning (US Patent No. US 6,707,581 B1).

Manchester teaches the limitation of claims **3, 4, 8 – 12, 15** with the exception of disclosing bar code scanner and product information. However, Browning discloses a handheld device that scans a line of information, such as bar codes. Retrieval software is included to obtain the information associated with the scanned image.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **15: a mobile device**) [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device [0027]. The display image (14) is oriented with respect to



the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 15: ***automatically orients display based on user perspective***) [0025]. The display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button (18), or a combination therefor. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [0036]. The sensed image maybe analyzed for key features [0036].

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [column 2, lines 38 – 49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) (claim 8, claim 15: ***capturing an image***) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim 4) [column 2, lines 50 – 57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects. Referring to Fig. 3, the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to

carry out the method of Browning (claim 9) [column 3, lines 48 – 51]. The electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [column 3, lines 7 – 9] for subsequent presentation to a companion information-retrieval agent [column 3, lines 31 – 33]. The handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image (claim 10) [column 4, lines 3 – 7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [column 4, lines 21 – 23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt (claim 11, 12) [column 5, lines 31 – 32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient (claim 3) [column 5, lines 33 – 34].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a barcode scanner as the camera within the authentication component of Manchester because the barcode scanner would provide a means to sense an object (such as a barcode) resulting in displaying the object within display portion (14a) of Fig. 1 of Manchester associated with the barcode and providing information associated with the barcode of that obtained image within the display portion (14b) of Fig. 1 of Manchester associated with the barcode.

7. Claims **13, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (US Patent No. US 6,707,581 B1) in view of Manchester (US Publication No. US 2004/0201595 A1).

Browning teaches the limitations of claims **13, 14** with the exception of disclosing automatically orienting the rendered graphic objects. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [col. 2, lines 38 – 49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim **13: *portable bar code scanning device***) [col. 2, lines 50 – 57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (claim **13: *display***).

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14) (claims **13: *displaying graphical objects***), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the

display image (14), such as hand held devices [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim 14: ***means for determining user desire orientation for display objects***) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 13: ***changing object display parameters to provide at least one of an optimized object display and an optimized viewing position***; claim 14: ***automatically orients display based on user perspective***) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the sensors and self-orientation circuitry of Manchester within the display and microprocessor of Browning's handheld scanner to automatically orient the graphical image on the display of Browning because there would be times when the user will scan a barcode located on an object where the handheld scanner would need to be oriented in a manner that is not in alignment with the user's view, causing the graphical object on the display on the handheld scanner to be skewed from the user's viewing. Thus, the user would have to angle their head to view the graphical object on the display when the barcode is being scanned. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the handheld scanner.

8. Claim **17** is rejected under 35 U.S.C. 103(a) as being unpatentable over in view Ogawa (US Patent No. 6,937,281 B1) in view of Manchester (US Publication No. 2004/0201595 A1).

Ogawa teaches the limitations of claim **17** with the exception of disclosing an artificial intelligence component that determines an optimal screen orientation for the display based on the user's position. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

Ogawa teaches an electronic image pickup apparatus (**digital camera**) for picking up an image by using an image sensor (14) as shown in Fig. 1 (claim **17**: data capture component that captures data) [col. 2, lines 50-60]. An image display part (28) is included in the image pickup apparatus (claim **17**: **display**) [col. 3, lines 27-54]. The operation means (68) is a single-shooting/continuous-shooting switch. When the shutter switch (64) is depressed, a single frame, or a continuous shooting mode is set. The continuous shooting mode is in which a plurality of frames are successively exposed for a period of time during which the shutter switch (64) continues being depressed [col. 5, lines 42-48]. Furthermore, the operation means (70) is an operation part, which is composed of various buttons, including a single-shooting/continuous-shooting self-timer changeover button [col. 5, lines 50-55]. Thus, the user can set the image pickup apparatus of Ogawa for self-timing for continuous shooting (claim **17**: **continuous and hands-free capture of data**). Furthermore, the image pickup

apparatus can be set on a table when set with the self-timer for continuous shooting so that the user can be in the picture.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16) (claim 17: ***artificial intelligence component***), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 17: ***automatically orients display based on user perspective***) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the self-orienting display of Manchester of the image display portion (i.e. screen) of image display means of Ogawa because there would be times when the user would like to capture an images that is not directly in front of the user, and would thus need to position the camera in a manner that is not in alignment with the user's view, causing the graphical object on the display on the camera to be skewed from the user's viewing. Thus, the user would have to angle their head to view

the graphical object on the display when the image is being taken. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the digital camera.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Williams et al. (US Publication No. 2003/0234797 A1).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday - Friday, 7:00am - 4:30pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michelle K. Lay  
Patent Examiner  
Art Unit 2672

09.08.2005 mkl *u.*



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